CLAIMS

What is claimed is:

1. A system comprising:

a battery;

a super-capacitor (SC) coupled in parallel to the battery;

a computer system coupled to the battery and the SC; and

a current limiter, coupled to the battery, the SC and the computer system, that prevents excess current from flowing from the battery to the SC.

2. The system of claim 1 wherein the current limiter prevents excess current from flowing from the SC to the battery.

3. The system of claim 1 wherein SC prevents transients from the computer system from affecting the battery voltage.

4. The system of claim 3 wherein SC has a capacitance of 20 farad and a resistance of 5 m .

5. The system of claim 1 wherein the computer system comprises:

a power delivery subsection; and

a plurality of hardware components coupled to the power delivery subsection.

6. The system of claim 5 wherein the power delivery subsection comprises:

a system voltage regulator;

a chipset voltage regulator; and

a central processing unit (CPU) voltage regulator.

7. The system of claim 2 wherein the current limiter comprises:

a first transistor coupled to the battery;

a second transistor coupled to the first transistor; and

a resistor coupled to the second transistor, the SC and the computer system.

8. The system of claim 7 wherein the current limiter further comprises:

a first comparator with inputs coupled across the resistor and an output coupled to the gate of the second transistor; and

a second comparator with inputs coupled across the resistor and an output coupled to the gate of the first transistor.

9. The system of claim 8 wherein the first comparator deactivates the second transistor if the voltage across the resistor is greater than a first predetermined threshold.

10. The system of claim 9 wherein the second comparator deactivates the first

transistor if the voltage across the resistor is greater than a second predetermined threshold.

11. A system comprising:

a battery;

a super-capacitor (SC) coupled in parallel to the battery;

a power delivery system coupled to the battery and the SC; and

a current limiter, coupled to the battery, the SC and the power delivery system, that prevents excess current from flowing from the battery to the SC.

12. The system of claim 11 wherein the current limiter prevents excess current from flowing from the SC to the battery.

13. The system of claim 11 wherein SC prevents transients from the computer system from affecting the battery voltage.

14. The system of claim 11 wherein the power delivery system comprises:

a first voltage regulator; and

a second voltage regulator.

15. A current limiter comprising:

a first transistor coupled to a battery;

a second transistor coupled to the first transistor; and

a resistor coupled to the second transistor, and a super-capacitor (SC);

wherein the current limiter prevents excess current from flowing from the battery to the SC.

16. The current limiter of claim 15 further comprising:

a first comparator with inputs coupled across the resistor and an output coupled to the gate of the second transistor; and

a second comparator with inputs coupled across the resistor and an output coupled to the gate of the first transistor.

17. The current limiter of claim 16 wherein the first comparator deactivates the second transistor if the voltage across the resistor is greater than a first predetermined threshold.

18. The current limiter of claim 17 wherein the second comparator deactivates the first transistor if the voltage across the resistor is greater than a second predetermined threshold.